UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107-4431

100301

MAY 14 1993

FACSIMILE

Anne Hiller
DNREC
715 Grantham Lane
New Castle, DE 19720

RE: Follow-up to meeting with Standard Chlorine on 5/10/93

Dear Ms. Hiller:

In follow-up to our meeting with Standard Chlorine and Weston on May 10, 1993, I have spoken with the appropriate people to resolve the issues which required additional information.

RESPONSE LEVELS

I spoke with EPA's toxicologist concerning Standard Chlorine's response to EPA's comment as delineated at the top of page 12, item # 10 in their letter dated 4/30/93. EPA stands by its previous comment that a response/clean-up level must be developed for each of the contaminants of concern to insure that the remediation goals are protective of human health. The response level of 625 mg/kg is an average total. Using the calculation provided on Page 2-30 of the Feasibility Study for 1,4-dichlorobenzene, the response level is 449 for a carcinogenic risk of 1.00E-05.

Based on information reported in the Baseline Risk Assessment, EPA has calculated a clean-up level of 247.4 mg/kg for 1,4-dichlorobenzene (see enclosed internal memorandum). Both of these calculations are below the response level of 625 mg/kg. Standard Chlorine must either develop a clean-up level for each contaminant of concern, or they must identify the lowest clean-up level based on the various toxicities of the various contaminants. The calculations for the response levels should be based on a carcinogenic risk of 1.0E-05.

EFFLUENT PIPELINE INVESTIGATION

Mike Kress of Weston, stated at the meeting that the "Effluent Pipe Investigation" concluded that the pipeline was not impacting the groundwater. This is incorrect. The report concludes that there is little migration of site specific contaminants from monitoring well # 16.

On August 21, 1992 we met with Tom Drew of Weston along with

representatives from Standard Chlorine. I specifically told Tom Drew at that meeting that I did not want to delay the finalization of the RI since I was relatively new to the project at the time, but the contamination of subsurface soils adjacent to the pipeline must be addressed in the Feasibility Study (soil boring at MW #16 contained 1,922 ppm at 25'-27' and potential contamination at MW #18 due to an odor present at 24'-26' and 29'-31', but no sample taken).

Therefore, Standard Chlorine's response to our original comment (page 2 #3) as outlined at the top of page 3 must address the subsurface soils along the effluent pipeline.

It is my understanding that these are the only 2 items which required follow-up on my part.

In follow-up to the DNAPL issues, I recommend that we arrange for a conference call sometime next week with the hydrogeologist(s). If you have any questions, please give me a call at (215) 597-0910.

Sincerely

Katherine A. Lose

Katherine A. Lose
Remedial Project Manager
DE/MD Section

cc: D. Ioven, EPA
B. Pasquini, EPA

5/14/93

STANDARD CHLORINE ROD CHECKLIST
94(1)

APPROX. DATE		ACTION REQUIRED
APR 7		GET LIST OF ARARS FROM STATE (CHECK ON COASTAL ZONE & DRBC)
MAY 18		START FILLING IN DATA ON BOILER PLATE CONSENT DECREE (USER SHARE 95 PAGES)
MAY 20		START ADMIN RECORD - BOOZE ALLEN (922-5090)
MAY 15		DRAFT SECTIONS OF PROPOSED PLAN & ROD FROM RI. COMPLETE SECTIONS SITE NAME, LOCATION, AND DESCRIPTION, SITE HISTORY AND ENFORCEMENT ACTIVITIES
MAY 28		PREPARE PORTIONS OF PRN
JUN 1		RECEIVE FINAL FS
JUN 1		HAVE ADMIN RECORD FILES IN ORDER
JUN 3		MEET WITH JOAN/SARAH ON PRP SEARCH
JIN 15		FINE TUNE CD FOR PRP'S/DEVELOP DRAFT SNL'S
JUL 1		RECEIVE DRAFT TREATABILITY STUDY
JUL 9	???	SEND COMMENTS TO PRP ON TREATABILITY STUDY
JUL 15		APPROVE RI/FS- HAVE CONTRACTOR DISTRIBUTE COPIES (2 TO STATE, 2 FOR ADMIN RECORD, NAT'L RESOURCE TRUSTEES, AND OTHER , NOAA, ATSTDR, ETC. (GET ONE UNBOUND COPY)
JUL 30		PROPOSED PLAN (EPA) FACT SHEET FORMAT - BOTH OFFICES, FED EX. (SEND COPY TO EPA HQ) GIVE COPY TO PUBLIC AFFAIRS TO START ON PRESS RELEASE
JUL 31		COST RECOVERY DUE (PER JIM WEBB 4/6/93)
AUG 2		BRIEF BRANCH CHIEF AND OFFICE DIRECTOR
AUG 6		SET UP NEWS AD - REVIEW IT BEFORE IT GOES OUT AND SCHEDULE RA BRIEFING
AUG 6		RA BRIEFING
AUG 16		FINALIZE ADMIN. RECORD
AUG 17		**ISSUE PROPOSED PLAN, SEND COPIES TO PRP** (ALLOWS 60 DAYS - NOV 17 ROD)
AUG 23		GET STENO - ARCS OR PUBLIC AFFAIRS (PUBLIC MEETING MUST BE RECORDED)

AUG 31	**PUBLIC MEETING**
SEPT 1	PREREFERRAL NOTICE (PRN) PP AND CD TO DOJ (60 DAYS BEFORE ROD)
SEPT 13	1ST DRAFT OF ROD TO THOSE LISTED ON OCT 26
OCT 1	RECEIVE DOJ'S COMMENTS ON PRN (PRE-REFERRAL NOTICE) & CD
OCT 18	END OF PUBLIC COMMENT PERIOD (60 DAYS)
AUG 19	SIT DOWN W/ TES AND DEVELOP STRATEGY FOR RESPONSIVENESS SUMMARY
OCT 26	DISTRIBUTE 2ND DRAFT OF ROD - 2 TO STATE, ORC, ORC SEC. CHIEF, TOX, HYDRO, RCRA, AIR, BETAG, DRINK. WATER, NAT'S RESOURCE TRUSTEE, UST, SECTION CHIEF
NOV 1	COMPLETE RESPONSIVE SUMMARY REPORT
NOV 12	RECEIVE AND INCORPORATE ROD COMMENTS
NOV 15	GIVE DECLARATION TO STELLA ? FOR REVIEW
NOV 18	INITIATE ROD CONCURRANCE AND RESPONSIVENESS SUMMARY - IF APPLICABLE DO DUPLICATE CONCURRANCES FOR PROGRAMS AND ORC
NOV 23	STATE CONCURRANCE ???
NOV 30	**ROD SIGNATURE**
DEC 1	ISSUE SPECIAL NOTICE LETTER W/ DRAFT CD GET 15 COPIES (2 SIDED OF ROD FOR DISTRIBUTION) STATE, TOX, HYDRO, PRP'S (AS NEEDED), 2 FOR ADMIN RECORD, NAT'L R.T. , ARC'S CONTRACTOR, ???? (MAX = 30 DAYS AFTER ROD)

GW RESULTS IN RI FOR SAMPLE IN SS
TW-30 HAS BEEN REPORTED TO CONTAIN NAPL

AR307584

ESTIMATED EFFECTIVE SOLUBILITY OF NAPL COMPOUNDS AT THE STANDARD CHLORINE SITE 11-May-93

Contaminant Name	Water Solubility (mg/l)	Molecular Mass (g/mol)	GW RESULT (mg/l)	MOLES OF COMPOUND (mol/l)	MOLE FRACTION IN SAMPLE %	EFFECTIVE SOLUBILITY (mg/l)
Benzene	1.75E+03	7.80E+01	1.40E+02	1.79E-03	4.05E+01	7.09E+02
Chlorobenzene	4.66E+02	1.13E+02	1.50E+02	1.33E-03	3.00E+01	1.40E+02
1,2-dcb	1.00E+02	1.47E+02	8.90E+01	6.05E-04	1.37E+01	1.37E+01
1,4-dcb	7.90E+01	1.47E+02	1.00E+02	6.80E-04	1.54E+01	1.21E+01
1,2,4-tcb	3.00E+01	1.81E+02	3.22E+00	1.78E-05	4.02E-01	1.21E-01
1,2,3-tcb	3.00E+01	1.81E+02	2.22E-01	1.23E-06	2.77E-02	8.31E-03
1,2,4,5-tetracb	6.00E+00	2.16E+02	5.80E-02	2.69E-07	6.07E-03	3.64E-04
			4.83E+02	4.43E-03	1.00E+02	

dcb: dichlorobenzene, tcb: trichlorobenzene, tetracb: tetrachlorobenzene